WHAT IS CLAIMED IS:

1. An image forming apparatus comprising:

a plurality of image forming means each having an image carrier and forming an image on the image carrier;

mark detecting means for detecting a plurality of registration correction marks formed on a recording medium by the plurality of said image forming means;

correcting means for correcting a position difference between images formed by the plurality of said image forming means in accordance with a detection result by said mark detecting means; and

controlling means for independently controlling an image forming operation of each of the plurality of said image forming means so that an image density of each of the registration correction marks formed by the plurality of said image forming means has a different predetermined image density.

2. An apparatus according to claim 1, wherein each of the plurality of said image forming apparatus includes γ-converting means for γ-converting an input video signal in accordance with a γ-table and writing means for writing an image corresponding to the γ-converted video signal on the image carrier, and said controlling means independently changes the γ-table of each of the plurality of said image forming means.

3. An apparatus according to claim 2, wherein said controlling means sets a common value to the γ-table of each of the plurality of said image forming means in an usual image forming mode.

4. An apparatus according to claim 1, wherein each of the plurality of said image forming means includes writing means for writing an image by irradiating a laser beam to the image carrier, and said controlling means independently controls a light amount of the laser beam to be irradiated by each of the plurality of said image forming means.

5. An apparatus according to claim 4, wherein said controlling means outputs video signals having a same signal level corresponding to each of the registration correction marks to the plurality of said image forming means respectively.

6. An apparatus according to claim 5, wherein said writing means includes PWM signal generating means for generating a PWM signal in accordance with the video signal, and generates the laser beam in accordance with the PWM signal.

7. An apparatus according to claim 1, wherein the apparatus has a usual image forming mode and a position

shift correction mode, and said controlling means controls a density of an image to be formed by each of the plurality of said image forming means to have a common value.

8. An apparatus according to claim 1, wherein the recording medium includes a motion member which moves in order to transfer an image formed on the image carrier by each of the plurality of said image forming means at a transfer position.

9. An apparatus according to claim 1, wherein the recording medium includes a transfer belt which moves in order to transfer an image formed on the image carrier by each of the plurality of said image forming means to a transfer member at a transfer position.

10. An apparatus according to claim 1, wherein said mark detecting means includes illuminating means for irradiating infrared light to the recording medium and a sensor for detecting a reflection light of the infrared light from the registration correction mark on the recording medium.

11. An image forming apparatus comprising:

a plurality of image forming means each having an image carrier and forming an image of a different color

on the image carrier;

mark detecting means for detecting a plurality of registration correction marks of different colors formed on a recording medium by the plurality of said image forming means;

correcting means for correcting a position difference between color images formed by the plurality of said image forming means in accordance with a detection result by said mark detecting means; and

controlling means for independently controlling an image forming operation of each of the plurality of said image forming means so that the registration correction mark of a predetermined color is formed at a first predetermined density and the registration correction marks of colors different from the predetermined color are formed at a second predetermined density.

12. An apparatus according to claim 11, wherein each of the plurality of said image forming apparatus includes γ-converting means for γ-converting an input video signal in accordance with a γ-table and writing means for writing an image corresponding to the γ-converted video signal on the image carrier, and said controlling means independently changes the γ-table of each of the plurality of said image forming means.

13. An apparatus according to claim 12, wherein said controlling means sets a common value to the γ-table of each of the plurality of said image forming means in an usual image forming mode.

14. An apparatus according to claim 11, wherein each of the plurality of said image forming means includes writing means for writing an image by irradiating a laser beam to the image carrier, and said controlling means independently controls a light amount of the laser beam to be irradiated by each of the plurality of said image forming means.

15. An apparatus according to claim 14, wherein said controlling means outputs video signals having a same signal level corresponding to each of the registration correction marks to the plurality of said image forming means respectively.

16. An apparatus according to claim 15, wherein said writing means includes PWM signal generating means for generating a PWM signal in accordance with the video signal, and generates the laser beam in accordance with the PWM signal.

17. An apparatus according to claim 11, wherein the apparatus has a usual image forming mode and a

position shift correction mode, and said controlling means controls a density of an image to be formed by each of the plurality of said image forming means to have a common value.

18. An apparatus according to claim 11, wherein the recording medium includes a motion member which moves in order to transfer an image formed on the image carrier by each of the plurality of said image forming means at a transfer position.

19. An apparatus according to claim 11, wherein the recording medium includes a transfer belt which moves in order to transfer an image formed on the image carrier by each of the plurality of said image forming means to a transfer member at a transfer position.

20. An apparatus according to claim 11, wherein said mark detecting means includes illuminating means for irradiating infrared light to the recording medium and a sensor for detecting a reflection light of the infrared light from the registration correction mark on the recording medium.